WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Wednesday, February 28, 2007

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ		
☐	L8	thermophilum and L4	7
☐	L7	Chaetomium and L4	9
☐	L6	thermophilum same L4	0
☐	L5	Chaetomium same L4	0
☐	L4	(mutant or variant) same L3	27
☐	L3	(clone or recombinant or express$5) same L2	258
☐	L2	(gene or sequence or polynucleotide) same L1	369
☐	L1	Cellobiohydrolase	860

END OF SEARCH HISTORY

STN SEARCH #10/540,091 2/28/2007
=> index bioscience medicine

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 17:33:27 ON 28 FEB 2007

71 FILES IN THE FILE LIST IN STNINDEX

=> S cellobiohydrolase###
310 FILE AGRICOLA
47 FILE ANABSTR
6 FILE ANTE
2 FILE AQUALINE
12 FILE AQUASCI
318 FILE BIOENG
919 FILE BIOSIS
1131 FILE BIOTECHABS
1131 FILE BIOTECHDS
393 FILE BIOTECHNO
273 FILE CABA
1378 FILE CAPLUS
160 FILE CEABA-VTB
3 FILE CIN
20 FILE CONFSCI
3 FILE CROPU
15 FILE DDFU
1239 FILE DGENE
80 FILE DISSABS
16 FILE DRUGU
2 FILE EMBAL
496 FILE EMBASE
401 FILE ESBIOBASE
1 FILE FOREGE
30 FILE FROSTI
258 FILE FSTA
307 FILE GENBANK
139 FILE IFIPAT
72 FILE JICST-EPLUS
41 FILES SEARCHED...
487 FILE LIFESCI
452 FILE MEDLINE
29 FILE NTIS
2 FILE OCEAN
457 FILE PASCAL
9 FILE PROMT
1 FILE RDISCLOSURE
1126 FILE SCISEARCH
1 FILE SYNTHLINE
135 FILE TOXCENTER
665 FILE USPATFULL
69 FILE USPAT2
63 FILES SEARCHED...
2 FILE VETU
6 FILE WATER
157 FILE WPIDS
2 FILE WPIFV
157 FILE WPINDEX
68 FILES SEARCHED...
2 FILE IPA
7 FILE NLDB

48 FILES HAVE ONE OR MORE ANSWERS, 71 FILES SEARCHED IN STNINDEX

L1 QUE CELLOBIOHYDROLASE###

=> d rank
F1 1378 CAPLUS

F2 1239 DGENE
F3 1131 BIOTECHABS
F4 1131 BIOTECHDS
F5 1126 SCISEARCH
F6 919 BIOSIS
F7 665 USPATFULL
F8 496 EMBASE
F9 487 LIFESCI
F10 457 PASCAL
F11 452 MEDLINE
F12 401 ESBIOBASE
F13 393 BIOTECHNO
F14 318 BIOENG
F15 310 AGRICOLA
F16 307 GENBANK
F17 273 CABA
F18 258 FSTA
F19 160 CEABA-VTB
F20 157 WPIDS
F21 157 WPINDEX
F22 139 IFIPAT
F23 135 TOXCENTER
F24 80 DISSABS
F25 72 JICST-EPLUS

=> file f1, f3, f5-f15, f20

FILE 'CAPLUS' ENTERED AT 17:35:57 ON 28 FEB 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'SCISEARCH' ENTERED AT 17:35:57 ON 28 FEB 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'BIOSIS' ENTERED AT 17:35:57 ON 28 FEB 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'USPATFULL' ENTERED AT 17:35:57 ON 28 FEB 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 17:35:57 ON 28 FEB 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'LIFESCI' ENTERED AT 17:35:57 ON 28 FEB 2007
COPYRIGHT (C) 2007 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 17:35:57 ON 28 FEB 2007
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2007 INIST-CNRS. All rights reserved.

FILE 'MEDLINE' ENTERED AT 17:35:57 ON 28 FEB 2007

FILE 'ESBIOBASE' ENTERED AT 17:35:57 ON 28 FEB 2007
COPYRIGHT (C) 2007 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 17:35:57 ON 28 FEB 2007
COPYRIGHT (C) 2007 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'BIOENG' ENTERED AT 17:35:57 ON 28 FEB 2007
COPYRIGHT (C) 2007 Cambridge Scientific Abstracts (CSA)

FILE 'AGRICOLA' ENTERED AT 17:35:57 ON 28 FEB 2007

FILE 'WPIDS' ENTERED AT 17:35:57 ON 28 FEB 2007
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

=> S L1
L2 7559 L1

=> S (gene or sequence or polynucleotide)(s)L2
10 FILES SEARCHED...
L3 1619 (GENE OR SEQUENCE OR POLYNUCLEOTIDE)(S) L2

=> S (clone or recombinant or express?)(s) L3
10 FILES SEARCHED...
L4 847 (CLONE OR RECOMBINANT OR EXPRESS?)(S) L3

=> S (mutant or variant)(s) L4
L5 56 (MUTANT OR VARIANT)(S) L4

=> S Chaetomium(s) L5
L6 0 CHAETOMIUM(S) L5

=> S Chaetomium and L5
L7 8 CHAETOMIUM AND L5

=> S Chaetomium and L4
L8 43 CHAETOMIUM AND L4

=> S Thermophilum and L4
L9 51 THERMOPHILUM AND L4

=> dup rem L9
PROCESSING COMPLETED FOR L9
L10 48 DUP REM L9 (3 DUPLICATES REMOVED)

=> dup rem L8
PROCESSING COMPLETED FOR L8
L11 41 DUP REM L8 (2 DUPLICATES REMOVED)

=> d ibib abs L11 1-41

L11 ANSWER 1 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2007:30150 USPATFULL <<LOGINID::20070228>>
TITLE: Novel EGIII-like enzymes, DNA encoding such enzymes and methods for producing such enzymes
INVENTOR(S): Bower, Benjamin S., Pacifica, CA, UNITED STATES
Fowler, Timothy, San Carlos, CA, UNITED STATES
Phillips, Jay Ian, Palo Alto, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007026420	A1	20070201
APPLICATION INFO.:	US 2006-348013	A1	20060206 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-284327, filed on 10 Apr 1999, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94304-1013, US
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1-17
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2795
AB The present invention relates to methods of obtaining genes for novel enzymes which share certain conserved sequences with EGIII from Trichoderma reesei. These EG III like cellulases comprise an amino acid sequence comprising therein an amino acid string selected from the group consisting of:

(a) Asn-Asn-(Leu/Phe/Lys/Ile)-Trp-Gly (SEQ ID NO: 1)

(b) Glu-(Leu/Phe/Ile)-Met-Ile-Trp (SEQ ID NO: 2)

(c) Gly-Thr-Glu-Pro-Phe-Thr; (SEQ ID NO: 3)

(d) (Ser/Tyr/Cys/Trp/Thr/Asn/Lys/Arg)-(Val/Pro)-(Lys/Ala)-(Ser/Ala)-(Tyr/Phe); (SEQ ID NO: 42)

(e) Lys-Asn-Phe-Phe-Asn-Tyr. (SEQ ID NO: 5)

L11 ANSWER 2 OF 41 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2006:361406 CAPLUS <<LOGINID::20070228>>
DOCUMENT NUMBER: 144:383435
TITLE: Recombinant expression of ***Chaetomium*** thermophilum cellobiohydrolase 1 (cbh1) in Pichia pastoris
INVENTOR(S): Li, Duochuan; Liu, Shouan
PATENT ASSIGNEE(S): Shandong Agricultural University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1757710	A	20060412	CN 2005-10044074	20050715

PRIORITY APPLN. INFO.: CN 2005-10044074 20050715
AB The invention relates to recombinant expression of ***Chaetomium*** thermophilum cellobiohydrolase 1 (cbh1) in Pichia pastoris. The expressed cellobiohydrolase 1 has high thermal stability and with enzymic activity of 21 U/mL. The detailed procedure for cloning is provided.

L11 ANSWER 3 OF 41 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2006:361403 CAPLUS <<LOGINID::20070228>>
DOCUMENT NUMBER: 144:383434
TITLE: Recombinant expression of ***Chaetomium*** thermophilum cellobiohydrolase II (cbh2) in Pichia pastoris
INVENTOR(S): Li, Duochuan; Liu, Shouan
PATENT ASSIGNEE(S): Shandong Agricultural University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1757709	A	20060412	CN 2005-10044073	20050715

PRIORITY APPLN. INFO.: CN 2005-10044073 20050715
AB The present invention relates to recombinant expression of ***Chaetomium*** thermophilum cellobiohydrolase II (cbh2) in Pichia pastoris. The expressed cellobiohydrolase II has high thermal stability with activity of 26 U/mL. The Detailed procedure for cloning and expression of the enzyme is provided.

L11 ANSWER 4 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2006:288577 USPATFULL <<LOGINID::20070228>>
TITLE: Novel cellulases and their uses
INVENTOR(S): Vehmaanpera, Jari, Klaukkala, FINLAND
Puranen, Terhi, Nurmijarvi, FINLAND
Valtakari, Leena, Rajamaki, FINLAND
Kallio, Jarno, Jarvenpaa, FINLAND
Alapuranen, Marika, Tuusula, FINLAND
Paloheimo, Marja, Vantaa, FINLAND
Ojapalo, Pentti, Tuusula, FINLAND
PATENT ASSIGNEE(S): AB Enzymes GmbH, Darmstadt, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2006246566 A1 20061102
APPLICATION INFO.: US 2005-119526 A1 20050429 (11)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BANNER & WITCOFF, LTD., 28 STATE STREET, 28th FLOOR, BOSTON, MA, 02109-9601, US
NUMBER OF CLAIMS: 66
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 3105
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel cellulase fusion proteins, preparations of cellulase fusion proteins and compositions of cellulase fusion proteins. The present invention further provides cellulase expression vectors, host cells expressing cellulase and methods for preparing such vectors and cells. Uses of cellulases, cellulase preparations and cellulase compositions in the textile, detergent, pulp and paper industries are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2006:256214 USPATFULL <<LOGINID::20070228>>
TITLE: Polypeptides having cellobiohydrolase activity and polynucleotides encoding same
INVENTOR(S): Brown, Kimberly, Elk Grove, CA, UNITED STATES
Harris, Paul, Carnation, WA, UNITED STATES
Lopez De Leon, Alfredo, Davis, CA, UNITED STATES
Merino, Sandra, West Sacremento, CA, UNITED STATES
PATENT ASSIGNEE(S): Novozymes, Inc., Davis, CA, UNITED STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2006218671 A1 20060928
APPLICATION INFO.: US 2006-327821 A1 20060106 (11)

NUMBER DATE

PRIORITY INFORMATION: US 2005-642274P 20050106 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES, INC., 1445 DREW AVE, DAVIS, CA, 95616, US
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 3058
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to isolated polypeptides having cellobiohydrolase activity and isolated polynucleotides encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the polynucleotides as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2006:74200 USPATFULL <<LOGINID::20070228>>
TITLE: Novel laccase enzyme and use thereof
INVENTOR(S): Paloheimo, Marja, Vantaa, FINLAND
Valtakari, Leena, Rajamaki, FINLAND
Puranen, Terhi, Nurmijarvi, FINLAND
Kruus, Kristiina, Espoo, FINLAND
Kallio, Jarno, Jarvenpaa, FINLAND
Mantyla, Arja, Helsinki, FINLAND
Fagerstrom, Richard, Espoo, FINLAND
Ojapalo, Pentti, Tuusula, FINLAND

Vehmaanpera, Jari, Klaukkala, FINLAND
PATENT ASSIGNEE(S): AB Enzymes OY, Rajamaki, FINLAND, 05201 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006063246	A1	20060323
APPLICATION INFO.:	US 2005-231706	A1	20050921 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	FI 2004-1220	20040921
	US 2004-611819P	20040921 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: John Dodds, 1707 N St. NW, Washington, DC, 20036, US
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 23 Drawing Page(s)
LINE COUNT: 2487
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel laccase enzyme obtainable from the strains of genus Thielavia. The invention relates also to the nucleic acid sequence encoding the enzyme, a recombinant host into which the nucleic acid sequence has been introduced and a method for the production of the enzyme in a recombinant host. The enzyme of the invention is suitable for several applications, in particular for increasing the lightness of denim.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2006:62342 USPATFULL <<LOGINID::20070228>>
TITLE: Polypeptides having cellobiohydrolase II activity and polynucleotides encoding same
INVENTOR(S): Wu, Wenping, Beijing, CHINA
Lange, Lene, Valby, DENMARK
Skovlund, Dominique Aubert, Copenhagen N, DENMARK
Liu, Ye, Beijing, CHINA
PATENT ASSIGNEE(S): Novozymes A/S, Bagsvaerd, DENMARK (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006053514	A1	20060309
APPLICATION INFO.:	US 2003-540091	A1	20031219 (10)
	WO 2003-DK914		20031219
			20050620 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-435100P	20021220 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES NORTH AMERICA, INC., 500 FIFTH AVENUE, SUITE 1600, NEW YORK, NY, 10110, US
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1-22
LINE COUNT: 3792
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to polypeptides having cellobiohydrolase II activity and polynucleotides having a nucleotide sequence which encodes for the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid constructs as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2006:15865 USPATFULL <<LOGINID::20070228>>

TITLE: Method and DNA constructs for increasing the production level of carbohydrate degrading enzymes in filamentous fungi
INVENTOR(S): Paloheimo, Marja, Vantaa, FINLAND
Mantyla, Arja, Helsinki, FINLAND
Leskinen, Sanna, Hanko, FINLAND
Fagerstrom, Richard, Espoo, FINLAND
Kallio, Jarno, Jarvenpaa, FINLAND
Puranen, Terhi, Nurmijarvi, FINLAND
Lantto, Raija, Klaukkala, FINLAND
Suominen, Pirkko, Maple Grove, MN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006014247	A1	20060119
APPLICATION INFO.:	US 2005-108163	A1	20050418 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-562692P	20040416 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2357
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is related to a method and DNA constructs for obtaining in a filamentous fungus host a higher production level of a carbohydrate degrading (CD) enzyme, having in its original state a catalytic module (CAT) and a carbohydrate binding module (CBM) separated by a linker region. The DNA construct comprising a truncated actinomycetes, preferably Nonomuraea flexuosa (NJ) derived DNA sequence encoding a truncated form of the CD enzyme, for example Nf Xyn11A, Nf Xyn10A, and is introduced into a filamentous fungal host. Said CD enzyme contains the catalytically active region of CAT but lacks part or all of the CBM, or all of the CBM and part or all of the linker region and is expressed and secreted under the control of regulatory sequences comprising at least a signal sequence, but also promoters, terminators and DNA sequences encoding a secretable carrier protein or domains thereof, preferably originating from filamentous fungi are included. The production level obtained with DNA sequence having the shortened DNA sequence encoding the truncated form of the CD enzyme is higher than the production level obtained with DNA construct encoding the corresponding full length CD enzyme.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2005:268106 USPATFULL <<LOGINID::20070228>>
TITLE: Methods for degrading or converting plant cell wall polysaccharides
INVENTOR(S): Berka, Randy, Davis, CA, UNITED STATES
Cherry, Joel, Davis, CA, UNITED STATES
PATENT ASSIGNEE(S): Novozymes Biotech, Inc., Davis, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005233423	A1	20051020
APPLICATION INFO.:	US 2005-78921	A1	20050310 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-556779P	20040325 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES BIOTECH, INC., 1445 DREW AVE, DAVIS, CA,

95616, US
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 3179
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for converting plant cell wall polysaccharides into one or more products, comprising: treating the plant cell wall polysaccharides with an effective amount of a spent whole fermentation broth of a recombinant microorganism, wherein the recombinant microorganism expresses one or more heterologous genes encoding enzymes which degrade or convert the plant cell wall polysaccharides into the one or more products. The present invention also relates to methods for producing an organic substance, comprising: (a) saccharifying plant cell wall polysaccharides with an effective amount of a spent whole fermentation broth of a recombinant microorganism, wherein the recombinant microorganism expresses one or more heterologous genes encoding enzymes which degrade or convert the plant cell wall polysaccharides into saccharified material; (b) fermenting the saccharified material of step (a) with one or more fermenting microoganisms; and (c) recovering the organic substance from the fermentation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2005:247215 USPATFULL <<LOGINID::20070228>>
TITLE: Modified xylanases exhibiting improved expression
INVENTOR(S): White, Theresa, Ottawa, CANADA
Giroux, Genevieve R., Gloucester, CANADA
Wallace, Katie E. A., Nepean, CANADA
PATENT ASSIGNEE(S): IOGEN BIO-PRODUCTS CORPORATION (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005214410	A1	20050929
APPLICATION INFO.:	US 2005-88725	A1	20050325 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-556061P	20040325 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., SUITE 800, WASHINGTON, DC, 20037, US
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2613
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A modified Family 11 xylanase enzyme comprising a sequence that introduces a functional consensus glycosylation site is provided. Non-limiting examples of introduced glycosylation sites include mutation of the amino acid at position 34, 131, 180, 182, or a combination thereof, to an asparagine. The indicated amino acid position in the Family 11 xylanase is determined from sequence alignment of the xylanase of interest with that of a Trichoderma reesei xylanase II amino acid sequence. The introduced consensus glycosylation site facilitates increased expression efficiency of the modified xylanase when compared to the expression efficiency of a corresponding xylanase from which the modified xylanase was derived, using similar host strains and growth conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 11 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2005:81561 USPATFULL <<LOGINID::20070228>>
TITLE: Endoglucanases
INVENTOR(S): Schulein, Martin, Copenhagen, DENMARK
Henriksen, Torben, Copenhagen, DENMARK LR

Andersen, Lene Nonboe, Allerod, DENMARK
Lassen, Soren Flensted, Kobenhavn N, DENMARK
Kauppinen, Markus Sakari, Kobenhavn N, DENMARK
Lange, Lene, Valby, DENMARK
Nielsen, Ruby Ilum, Farum, DENMARK
Takagi, Shinobu, Ichikawa-shi, JAPAN
Ihara, Michiko, Chiba-shi, JAPAN
PATENT ASSIGNEE(S): Novozymes A/S, Bagsvaerd, DENMARK, DK-2880 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005070003	A1	20050331
APPLICATION INFO.:	US 2004-965499	A1	20041014 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-7521, filed on 10 Dec 2001, GRANTED, Pat. No. US 6855531 Continuation of Ser. No. US 1999-229911, filed on 13 Jan 1999, GRANTED, Pat. No. US 6387690 Division of Ser. No. US 1996-651136, filed on 21 May 1996, GRANTED, Pat. No. US 6001639 Continuation of Ser. No. WO 1996-DK105, filed on 18 Mar 1996, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1995-272	19950317
	DK 1995-885	19950808
	DK 1995-886	19950808
	DK 1995-887	19950808
	JP 1995-888	19950808
	JP 1996-137	19960212

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES NORTH AMERICA, INC., 500 FIFTH AVENUE, SUITE 1600, NEW YORK, NY, 10110
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 5810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to enzyme preparations consisting essentially of an enzyme which has cellulytic activity and comprises a first amino acid sequence having the following sequence

(SEQ ID NO: 79)

Thr	Arg	Xaa	Xaa	Asp	Cys	Cys	Xaa	Xaa	Xaa	Cys	Xaa	Trp	Xaa
1	2	3	4	5	6	7	8	9	10	11	12	13	14

and a second amino acid sequence having the following sequence

Trp	Cys	Cys	Xaa	Cys	(SEQ ID NO: 80)
1	2	3	4	5	

wherein, at position 3 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 4 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 8 of the first sequence, the amino acid is Arg, Lys or His; at positions 9, 10, 12 and 14, respectively, of the first sequence, and at position 4 of the second sequence, the amino acid is any of the 20 naturally occurring amino acid residues with the provisos that, in the first amino acid sequence, (i) when the amino residue at position 12 is Ser, then the amino acid residue at position 14 is not Ser, and (ii) when the amino residue at position 12 is Gly, then the amino acid residue at position 14 is not Ala, performs very well in industrial applications such as laundry compositions, for biopolishing of newly manufactured textiles, for providing an abraded look of cellulosic fabric or garment, and for treatment of paper pulp. Further, the invention relates to DNA constructs encoding such enzymes, a method for providing a gene encoding for such enzymes, a method of producing the enzymes, enzyme preparations containing such enzymes, and the use of these enzymes for a number of industrial applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 12 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2005:56704 USPATFULL <<LOGINID::20070228>>
TITLE: Variants of glycoside hydrolases
INVENTOR(S): Teter, Sarah, Davis, CA, UNITED STATES
Cherry, Joel, Davis, CA, UNITED STATES
Ward, Connie, Woodland, CA, UNITED STATES
Jones, Aubrey, Davis, CA, UNITED STATES
Harris, Paul, Carnation, WA, UNITED STATES
Yi, Jung, Sacramento, CA, UNITED STATES
PATENT ASSIGNEE(S): Novozymes Biotech, Inc., Davis, CA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048619	A1	20050303
APPLICATION INFO.:	US 2004-926223	A1	20040825 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-497809P	20030825 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES BIOTECH, INC., 1445 DREW AVE, DAVIS, CA, 95616
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 8623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to variants of a parent glycoside hydrolase, comprising a substitution at one or more positions corresponding to positions 21, 94, 157, 205, 206, 247, 337, 350, 373, 383, 438, 455, 467, and 486 of amino acids 1 to 513 of SEQ ID NO: 2, and optionally further comprising a substitution at one or more positions corresponding to positions 8, 22, 41, 49, 57, 113, 193, 196, 226, 227, 246, 251, 255, 259, 301, 356, 371, 411, and 462 of amino acids 1 to 513 of SEQ ID NO: 2 a substitution at one or more positions corresponding to positions 8, 22, 41, 49, 57, 113, 193, 196, 226, 227, 246, 251, 255, 259, 301, 356, 371, 411, and 462 of amino acids 1 to 513 of SEQ ID NO: 2, wherein the variants have glycoside hydrolase activity. The present invention also relates to nucleotide sequences encoding the variant glycoside hydrolases and to nucleic acid constructs, vectors, and host cells comprising the nucleotide sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 13 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2005:223268 USPATFULL <<LOGINID::20070228>>
TITLE: Enhanced expression of proteins in genetically modified fungi
INVENTOR(S): White, Theresa C., Ottawa, CANADA
McHugh, Sylvia, Gloucester, CANADA
Hindle, Christopher D., Gloucester, CANADA
PATENT ASSIGNEE(S): Iogen Energy Corporation, Ontario, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6939704	B1	20050906
APPLICATION INFO.:	US 1999-392476		19990909 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-37524, filed on 10 Mar 1998, Pat. No. US 6015703
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wax, Robert A.
LEGAL REPRESENTATIVE: Fitzpatrick, Cella, Harper & Scinto
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 11
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 2652
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to increasing the production of a protein of interest from a fugal host. The invention discloses nucleotide sequences comprising, a regulatory region in operative association with xylanase secretion sequence and a gene of interest. The gene of interest encodes a protein selected from a pharmaceutical, nutraceutical, industrial, animal feed, food additive and an enzyme. Preferably, the gene of interest encodes a cellulase, hernicellulase, a lignin degrading enzyme, pectinase, protease, or peroxidase. The present invention also relates to vectors and hosts comprising these nucleic acid sequences, and to methods for the production of a protein of interest.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 14 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2004:306976 USPATFULL <<LOGINID::20070228>>
TITLE: Expression cloning in filamentous fungi
INVENTOR(S): Van Den Brink, Johannes Maarten, Denmark, NETHERLANDS
Selten, Gerardus Cornelis Maria, Berkel En Rodenrijs, NETHERLANDS
Van Den Hombergh, Johannes Petrus Theodorus Wilhelmus, Meentweg, NETHERLANDS
PATENT ASSIGNEE(S): DSM N.V., TE Heerlen, NETHERLANDS, NL-6411 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004241647	A1	20041202
APPLICATION INFO.:	US 2002-116396	A1	20020404 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-555998, filed on 17 Jul 2000, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S. Wacker Drive, Chicago, IL, 60606
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 1626
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for isolation of DNA sequences encoding proteins with properties of interest by means of expression cloning in filamentous fungal host cells. The isolated DNA sequences are useful in processes for producing the proteins of interest.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2004:254364 USPATFULL <<LOGINID::20070228>>
TITLE: Polypeptides having cellobiohydrolase I activity and polynucleotides encoding same
INVENTOR(S): Lange, Lene, Valby, DENMARK
Wu, Wenping, Beijing, CHINA
Aubert, Dominique, Copenhagen, DENMARK
Landvik, Sara, Copenhagen, DENMARK
Schnorr, Kirk Matthew, Bagsvaerd, DENMARK
Clausen, Ib Groth, Birkerod, DENMARK

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004197890	A1	20041007
APPLICATION INFO.:	US 2003-481179	A1	20031217 (10)
	WO 2002-DK429		20020626

	NUMBER	DATE
PRIORITY INFORMATION:	DK 2001-1000	20010626

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: NOVOZYMES NORTH AMERICA, INC., 500 FIFTH AVENUE, SUITE 1600, NEW YORK, NY, 10110
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: CLM-01-29
LINE COUNT: 7625
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to polypeptides having cellobiohydrolase I activity and polynucleotides having a nucleotide sequence which encodes for the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid constructs as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2004:239692 USPATFULL <<LOGINID::20070228>>
TITLE: Novel cellulases, the genes encoding them and uses thereof
INVENTOR(S): Miettinen-Oinonen, Arja, Masala, FINLAND
Londesborough, John, Helsinki, FINLAND
Vehmaanpera, Jari, Klaukkala, FINLAND
Haakana, Heli, Espoo, FINLAND
Mantyla, Arja, Helsinki, FINLAND
Lantto, Raija, Klaukkala, FINLAND
Elovainio, Minna, Helsinki, FINLAND
Joutsjoki, Vesa, Jokioinen, FINLAND
Paloheimo, Marja, Vantaa, FINLAND
Suominen, Pirkko, Helsinki, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004185498	A1	20040923
APPLICATION INFO.:	US 2004-825378	A1	20040416 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-841636, filed on 30 Apr 1997, GRANTED, Pat. No. US 6723549 Continuation of Ser. No. WO 1996-FI550, filed on 17 Oct 1996, UNKNOWN Continuation-in-part of Ser. No. US 1996-732181, filed on 16 Oct 1996, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-5335P	19951017 (60)
	US 1995-7926P	19951204 (60)
	US 1996-20840P	19960628 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., WASHINGTON, DC, 20005
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Page(s)
LINE COUNT: 3446
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes encoding novel cellulases, and a gene encoding a protein that facilitates the action of such novel cellulases, the novel cellulases and a protein that facilitates the action of such cellulases, and enzyme preparations containing such proteins are described. The native hosts and the culture medium of said hosts containing said novel cellulases are also disclosed. These proteins are especially useful in the textile and detergent industry and in pulp and paper industry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 17 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2004:184561 USPATFULL <<LOGINID::20070228>>
TITLE: Novel cellulases, the genes encoding them and uses thereof
INVENTOR(S): Miettinen-Oinonen, Arja, Masala, FINLAND
Londesborough, John, Helsinki, FINLAND
Vehmaanpera, Jari, Klaukkala, FINLAND

Haakana, Heli, Espoo, FINLAND
Mantyla, Arja, Helsinki, FINLAND
Lantto, Raija, Klaukkala, FINLAND
Elovainio, Minna, Helsinki, FINLAND
Joutsjoki, Vesa, Jokioinen, FINLAND
Paloheimo, Marja, Vantaa, FINLAND
Suominen, Pirkko, Helsinki, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004142444	A1	20040722
APPLICATION INFO.:	US 2004-782002	A1	20040220 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-841636, filed on 30 Apr 1997, GRANTED, Pat. No. US 6723549 Continuation of Ser. No. WO 1996-FI550, filed on 17 Oct 1996, UNKNOWN Continuation-in-part of Ser. No. US 1996-732181, filed on 16 Oct 1996, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-5335P	19951017 (60)
	US 1995-7926P	19951204 (60)
	US 1996-20840P	19960628 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., WASHINGTON, DC, 20005
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Page(s)
LINE COUNT: 3044
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding novel cellulases, and a gene encoding a protein that facilitates the action of such novel cellulases, the novel cellulases and a protein that facilitates the action of such cellulases, and enzyme preparations containing such proteins are described. The native hosts and the culture medium of said hosts containing said novel cellulases are also disclosed. These proteins are especially useful in the textile and detergent industry and in pulp and paper industry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 18 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2004:2115 USPATFULL <<LOGINID::20070228>>
TITLE: Transformation system in the field of filamentous fungal hosts
INVENTOR(S): Emalfarb, Mark Aaron, Jupiter, FL, UNITED STATES
Burlingame, Richard Paul, Manitowoc, WI, UNITED STATES
Olson, Philip Terry, Manitowoc, WI, UNITED STATES
Sinitsyn, Arkady Panteleimonovich, Moscow, RUSSIAN FEDERATION
Parriche, Martine, Toulouse, FRANCE
Bousson, Jean Christophe, Quint-Fonsegrives, FRANCE
Pynnonen, Christine Marie, Appleton, WI, UNITED STATES
Punt, Peter Jan, Houten, NETHERLANDS
Van Zeijl, Cornelia Maria Johanna, Vleuten-De Meern, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004002136	A1	20040101
APPLICATION INFO.:	US 2003-394568	A1	20030321 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-548938, filed on 13 Apr 2000, GRANTED, Pat. No. US 6573086 Continuation-in-part of Ser. No. WO 1998-EP6496, filed on 6 Oct 1998, UNKNOWN Continuation-in-part of Ser. No. WO 1999-NL618, filed on 6 Oct 1999, UNKNOWN
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN & FINNEGAN, L.L.P., 345 Park Avenue, New York,

NY, 10154-0053
NUMBER OF CLAIMS: 73
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 35 Drawing Page(s)
LINE COUNT: 2982
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel transformation system in the field of filamentous fungal hosts for expressing and secreting heterologous proteins or polypeptides is described. The invention also covers a process for producing large amounts of polypeptide or protein in an economical manner. The system comprises a transformed or transfected fungal strain of the genus Chrysosporium, more particularly of Chrysosporium lucknowense and mutants or derivatives thereof. It also covers transformants containing Chrysosporium coding sequences, as well expression-regulating sequences of Chrysosporium genes. Also provided are novel fungal enzymes and their encoding sequences and expression-regulating sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 19 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:288709 USPATFULL <<LOGINID::20070228>>
TITLE: Novel variant EGIII-like cellulase compositions
INVENTOR(S): Gualfetti, Peter, San Francisco, CA, UNITED STATES
Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
Phillips, Jay, Palo Alto, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003203467	A1	20031030
	US 7094588	B2	20060822
APPLICATION INFO.:	US 2003-441625	A1	20030519 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94034-1013
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 2448
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 20 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:266226 USPATFULL <<LOGINID::20070228>>
TITLE: Novel expression-regulating sequences and expression products in the field of filamentous fungi
INVENTOR(S): Emalfarb, Mark Aaron, Jupiter, FL, UNITED STATES
Punt, Peter Jan, Houten, NETHERLANDS
Johanna Van Zeijl, Cornelia Maria, Vleuten De Meern, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003187243	A1	20031002
APPLICATION INFO.:	US 2003-257629	A1	20030411 (10)
	WO 2001-NL301		20010417

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Morgan & Finnegan, Suite 700, 1775 Eye Street, Washington, DC, 20006
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 2522
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention pertains to novel proteins corresponding to Chrysosporium glycosyl hydrolases of families 7 and 10, exhibiting a minimum aminoacid identity of 70 and 75%, respectively, with the amino acid sequence of SEQ ID No's 2 and 4, and to a protein corresponding to a Chrysosporium glyceraldehyde phosphate dehydrogenase, exhibiting at least 86% amino acid identity with the partial amino acid sequence of SEQ ID No. 6. The invention further relates to nucleic acid sequences encoding these proteins, and especially to promoter sequences regulating the expression of the corresponding genes. The preferred host for expressing these genes is a fungus, especially a Chrysosporium strain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 21 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:265403 USPATFULL <<LOGINID::20070228>>
TITLE: Novel variant EGIII-like cellulase compositions
INVENTOR(S): Gualfetti, Peter, San Francisco, CA, UNITED STATES
Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
Phillips, Jay, Palo Alto, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003186418	A1	20031002
APPLICATION INFO.:	US 2003-441626	A1	20030519 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94034-1013
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 2451
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 22 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:213815 USPATFULL <<LOGINID::20070228>>
TITLE: Production and secretion of proteins of bacterial origin in filamentous fungi
INVENTOR(S): Mantyla, Arja, Helsinki, FINLAND
Paloheimo, Marja, Vantaa, FINLAND
Lantto, Raija, Klaukkala, FINLAND
Fagerstrom, Richard, Espoo, FINLAND
Lahtinen, Tarja, Vantaa, FINLAND
Suominen, Pirkko, Helsinki, FINLAND
Vehmaanpera, Jari, Klaukkala, FINLAND
PATENT ASSIGNEE(S): Rohm Enzyme Finland Oy (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003148453	A1	20030807
APPLICATION INFO.:	US 2002-286993	A1	20020813 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-120804, filed on 23 Jul 1998, ABANDONED Continuation of Ser. No. WO 1997-FI37, filed on 24 Jan 1997, UNKNOWN Continuation-in-part of Ser. No. US 1996-590563, filed on 26 Jan 1996, PATENTED Continuation-in-part of Ser. No. US 1995-468812, filed on 6 Jun 1995, GRANTED, Pat. No. US 5935836 Continuation-in-part of Ser. No. US 1994-332412, filed on 31 Oct 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-282001, filed

on 29 Jul 1994, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Page(s)
LINE COUNT: 3062
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is related to an improved production of bacterial proteins in filamentous fungus, e.g. in Tfichodenna and Aspergillus. The improvement is achieved by constructing expression vectors, which comprise the bacterial protein encoding DNA sequences fused in frame with a DNA sequence encoding a filamentous fungus secretable protein or one or more functional domains of said protein. Filamentous fungus hosts transformed with such expression vectors secrete the desired proteins or enzymes, especially xylanases or cellulases originating from bacteria or more preferably from actinornycetes into the culture medium of the host. The desired proteins or enzymes can be used directly from the culture medium after separation of host cells or recovered and treated using down-stream processes, which are appropriate for the respective application. Xylanases or cellulases from actinomycetes produced using the above expression vectors are most suitable for treating plant derived materials e.g. in pulp and paper industries.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 23 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:152880 USPATFULL <<LOGINID::20070228>>
TITLE: Microbial swollenin protein, DNA sequences encoding such swollenins and method of producing such swollenins
INVENTOR(S): Swanson, Barbara A., San Francisco, CA, UNITED STATES
Ward, Michael, San Francisco, CA, UNITED STATES
Penttila, Merja, Helsinki, FINLAND
Pere, Jaakko, Vantaa, FINLAND
Saloheimo, Markku, Helsinki, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003104546	A1	20030605
	US 6967246	B2	20051122
APPLICATION INFO.:	US 2002-197294	A1	20020717 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-112498, filed on 9 Jul 1998, GRANTED, Pat. No. US 6458928 Continuation-in-part of Ser. No. US 1997-893766, filed on 11 Jul 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GENENCOR INTERNATIONAL, INC., 925 PAGE MILL ROAD, PALO ALTO, CA, 94304
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1903
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel microbial protein is described which appears to have significant homology to plant expansin proteins and has the ability to weaken filter paper and swell cellulose. A DNA is described which encodes the novel protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 24 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:78618 USPATFULL <<LOGINID::20070228>>
TITLE: Endoglucanases
INVENTOR(S): Schulein, Martin, Copenhagen, DENMARK
Dela, Hanne, Copenhagen, DENMARK LR
Andersen, Lene Nonboe, Allerod, DENMARK
Lassen, Soren Flensted, Kobenhavn N, DENMARK

Kauppinen, Markus Sakari, Kobenhavn N, DENMARK
Lange, Lene, Valby, DENMARK
Nielsen, Ruby Ilum, Farum, DENMARK
Takagi, Shinobu, Ichikawa-shi, JAPAN
Ihara, Michiko, Chiba-shi, JAPAN
PATENT ASSIGNEE(S): Novozymes A/S, Bagsvaerd, DENMARK, D (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003054539	A1	20030320
	US 6855531	B2	20050215
APPLICATION INFO.:	US 2001-7521	A1	20011210 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-229911, filed on 13 Jan 1999, PENDING Division of Ser. No. US 1996-651136, filed on 21 May 1996, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1995-272	19950317
	DK 1995-888	19950808
	DK 1995-887	19950808
	DK 1995-886	19950808
	DK 1995-885	19950808
	DK 1996-137	19960212

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES NORTH AMERICA, INC.; C/O NOVO NORDISK OF NORTH AMERICA, INC., 405 LEXINGTON AVENUE, SUITE 6400, NEW YORK, NY, 10174
NUMBER OF CLAIMS: 105
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 4551
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to enzyme preparations consisting essentially of an enzyme which has cellulytic activity and comprises a first amino acid sequence having the following sequence

(SEQ ID NO:79)
Thr Arg Xaa Xaa Asp Cys Cys Xaa Xaa
1 2 3 4 5 6 7 8 9

Xaa Cys Xaa Trp Xaa
10 11 12 13 14

and a second amino acid sequence having the following sequence

Trp Cys Cys Xaa Cys (SEQ ID NO:80)
1 2 3 4 5

wherein, at position 3 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 4 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 8 of the first sequence, the amino acid is Arg, Lys or His; at positions 9, 10, 12 and 14, respectively, of the first sequence, and at position 4 of the second sequence, the amino acid is any of the 20 naturally occurring amino acid residues with the provisos that, in the first amino acid sequence, (i) when the amino residue at position 12 is Ser, then the amino acid residue at position 14 is not Ser, and (ii) when the amino residue at position 12 is Gly, then the amino acid residue at position 14 is not Ala, performs very good in industrial applications such as laundry compositions, for biopolishing of newly manufactured textiles, for providing an abraded look of cellulosic fabric or garment, and for treatment of paper pulp. Further, the invention relates to DNA constructs encoding such enzymes, a method for providing a gene encoding for such enzymes, a method of producing the enzymes, enzyme preparations containing such enzymes, and the use of these enzymes for a number of industrial applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 25 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:78598 USPATFULL <<LOGINID::20070228>>
TITLE: Novel xylanase from trichoderma reesei, method for production thereof, and methods employing this enzyme
INVENTOR(S): Saloheimo, Markku La, Helsinki, FINLAND
Siika-Aho, Matti, Helsinki, FINLAND
Tenkanen, Maija, Espoo, FINLAND
Penttila, Merja E., Helsinki, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003054518	A1	20030320
	US 6768001	B2	20040727
APPLICATION INFO.:	US 2002-159487	A1	20020531 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-658772, filed on 11 Sep 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-173889P	19991230 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94034-1013
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 1830
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to novel xylanases (referred to as XYL-IV) and to nucleic acid molecules encoding those xylanases. Also provided herein are vectors and host cells including those nucleic acid sequences, antibodies which bind to the xylanases of the present invention, methods for producing the xylanases of the present invention, and methods employing the xylanases of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 26 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:279106 USPATFULL <<LOGINID::20070228>>
TITLE: Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same
INVENTOR(S): Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Ropp, Traci H., San Francisco, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6635465	B1	20031021
APPLICATION INFO.:	US 2000-632575		20000804 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Genencor International, Inc
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 2248
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to variant EGIII cellulases that have improved stability and/or performance. The variant cellulases have replacements at sensitive residues to improve stability and/or performance.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 27 OF 41 USPATFULL on STN

ACCESSION NUMBER: 2003:279105 USPATFULL <<LOGINID::20070228>>
TITLE: Xylanases, genes encoding them, and uses thereof
INVENTOR(S): Paloheimo, Marja, Vantaa, FINLAND
Hakola, Satu, Perttula, FINLAND
Mantyla, Arja, Helsinki, FINLAND
Vehmaanpera, Jari, Klaukkala, FINLAND
Lantto, Raija, Klaukkala, FINLAND
Lahtinen, Tarja, Vantaa, FINLAND
Fagerstrom, Richard, Espoo, FINLAND
Suominen, Pirkko, Helsinki, FINLAND
PATENT ASSIGNEE(S): Rohm Enzyme Finland OY, Rajamaki, FINLAND (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6635464	B1	20031021
APPLICATION INFO.:	US 2001-849242		20010507 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-768373, filed on 17 Dec 1996, now patented, Pat. No. US 6228629

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8746P	19951218 (60)
	US 1996-20839P	19960628 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Rao, Manjunath N.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB DNA encoding novel xylanases, vectors containing such DNA, hosts transformed with such DNA, enzyme preparations, and the use of such preparations are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 28 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:253540 USPATFULL <<LOGINID::20070228>>
TITLE: Variant EGIII-like cellulase compositions
INVENTOR(S): Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Phillips, Jay, Palo Alto, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6623949	B1	20030923
APPLICATION INFO.:	US 2000-632570		20000804 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Genencor International, Inc
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 2361
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 29 OF 41 USPATFULL on STN

ACCESSION NUMBER: 2003:161939 USPATFULL <<LOGINID::20070228>>
TITLE: Variant EGIII-like cellulase compositions
INVENTOR(S): Day, Anthony G., San Francisco, CA, United States
Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Shaw, Andrew, San Francisco, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6579841	B1	20030617
APPLICATION INFO.:	US 2000-633085		20000804 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-216295, filed on 18 Dec 1998, now patented, Pat. No. US 6268328
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Gupta, Yogendra N.
ASSISTANT EXAMINER: Elhilo, Eisa
LEGAL REPRESENTATIVE: Genencor International, Inc.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 1729
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases which have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 30 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:148888 USPATFULL <<LOGINID::20070228>>
TITLE: Transformation system in the field of filamentous fungal hosts
INVENTOR(S): Emalfrab, Mark Aaron, Jupiter, FL, United States
Burlingame, Richard Paul, Manitowoc, WI, United States
Olson, Philip Terry, Manitowoc, WI, United States
Sinitsyn, Arkady Panteleimonovich, Moscow, RUSSIAN FEDERATION
Parriche, Martine, Toulouse, FRANCE
Bousson, Jean Christophe, Quint-Fonsegrives, FRANCE
Pynnonen, Christine Marie, Manitowoc, WI, United States
Punt, Peter Jan, Houten, NETHERLANDS
Van Zeijl, Cornelia Marie Johanna, Vieuten-De Meern, NETHERLANDS
PATENT ASSIGNEE(S): Dyadic International, Inc., Jupiter, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6573086	B1	20030603
APPLICATION INFO.:	US 2000-548938		20000413 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1999-NL618, filed on 6 Oct 1999 Continuation-in-part of Ser. No. WO 1998-EP6496, filed on 6 Oct 1998
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Ketter, James
LEGAL REPRESENTATIVE: Morgan & Finnegan, LLP
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 69 Drawing Figure(s); 36 Drawing Page(s)
LINE COUNT: 3710
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel transformation system in the field of filamentous fungal hosts for expressing and secreting heterologous proteins or polypeptides is described. The invention also covers a process for producing large amounts of polypeptide or protein in an economical manner. The system

comprises a transformed or transfected fungal strain of the genus Chrysosporium, more particularly of Chrysosporium lucknowense and mutants or derivatives thereof. It also covers transformants containing Chrysosporium coding sequences, as well expression-regulating sequences of Chrysosporium genes. Also provided are novel fungal enzymes and their encoding sequences and expression-regulating sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 31 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2003:115726 USPATFULL <<LOGINID::20070228>>
TITLE: Xylanase from Trichoderma reesei , method for production thereof, and methods employing this enzyme
INVENTOR(S): Saloheimo, Markku La, Helsinki, FINLAND
Siika-Aho, Matti, Helsinki, FINLAND
Tenkanen, Maija, Espoo, FINLAND
Penttila, Merja E., Helsinki, FINLAND
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6555335	B1	20030429
APPLICATION INFO.:	US 2000-658772		20000911 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-173889P	19991230 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Yucel, Remy
ASSISTANT EXAMINER: Davis, Katherine F
LEGAL REPRESENTATIVE: Genencor International, Inc
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1790
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to novel xylanases (referred to as XYL-IV) and to nucleic acid molecules encoding those xylanases. Also provided herein are vectors and host cells including those nucleic acid sequences, antibodies which bind to the xylanases of the present invention, methods for producing the xylanases of the present invention, and methods employing the xylanases of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 32 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2002:301207 USPATFULL <<LOGINID::20070228>>
TITLE: NOVEL CELLULASES, THE GENES ENCODING THEM AND USES THEREOF
INVENTOR(S): MIETTINEN-OINONEN, ARJA, MASALA, FINLAND
LONDESBOROUGH, JOHN, HELSINKI, FINLAND
VEHMAANPERA, JARI, KLAUKKALA, FINLAND
HAAKANA, HELI, RAJAMAKI, FINLAND
MANTYLA, ARJA, HELSINKI, FINLAND
LANTTO, RAIJA, KLAUKKALA, FINLAND
ELOVAINIO, MINNA, HELSINKI, FINLAND
JOUTSJOKI, VESA, HELSINKI, FINLAND
PALOHEIMO, MARJA, VANTAA, FINLAND
SUOMINEN, PIRKKO, HELSINKI, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002168751	A1	20021114
	US 6723549	B2	20040420
APPLICATION INFO.:	US 1997-841636	A1	19970430 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-732181, filed on 16 Oct 1996, ABANDONED
DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE KESSLER GOLDSTEIN AND FOX, SUITE 600, 1100 NEW YORK AVENUE NW, WASHINGTON, DC, 200053934
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Page(s)
LINE COUNT: 3553
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes encoding novel cellulases, and a gene encoding a protein that facilitates the action of such novel cellulases, the novel cellulases and a protein that facilitates the action of such cellulases, and enzyme preparations containing such proteins are described. The native hosts and the culture medium of said hosts containing said novel cellulases are also disclosed. These proteins are especially useful in the textile and detergent industry and in pulp and paper industry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 33 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2002:280100 USPATFULL <<LOGINID::20070228>>
TITLE: Expression cloning in filamentous fungi
INVENTOR(S): Van Den Brink, Johannes Maarten, Kobnhavn-O, DENMARK
Selten, Gerardus Cornelis Maria, Berkel En Rodenrijs, NETHERLANDS
Van Den Hombergh, Johannes Petrus Theodorus Wilhelmus, de Meern, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155536	A1	20021024
APPLICATION INFO.:	US 2001-993164	A1	20011105 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-555998, filed on 17 Jul 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1998-EP8577	19981222
	EP 1997-204079	19971222

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S. Wacker Drive, Chicago, IL, 60606
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 1628
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for isolation of DNA sequences encoding proteins with properties of interest by means of expression cloning in filamentous fungal host cells. The isolated DNA sequences are useful in processes for producing the proteins of interest.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 34 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2002:164732 USPATFULL <<LOGINID::20070228>>
TITLE: MICROBIAL SWOLLENIN PROTEIN, DNA SEQUENCES ENCODING SUCH SWOLLENINS AND METHOD OF PRODUCING SUCH SWOLLENINS
INVENTOR(S): SWANSON, BARBARA A., SAN FRANCISCO, CA, UNITED STATES
WARD, MICHAEL, SAN FRANCISCO, CA, UNITED STATES
PENTTILA, MERJA, HELSINKI, FINLAND
JAAKKO, PERE, VANTAA, FINLAND
SALOHEIMO, MARKKU, HELSINKI, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002086350	A1	20020704
	US 6458928	B2	20021001
APPLICATION INFO.:	US 1998-112498	A1	19980709 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-893766, filed

on 11 Jul 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KIRSTEIN A ANDERSON, GENENCOR INTERNATIONAL, 925 PAGE MILL ROAD, PALO ALTO, CA, 943041013
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1328
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel microbial protein is described which appears to have significant homology to plant expansin proteins and has the ability to weaken filter paper and swell cellulose. A DNA is described which encodes the novel protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 35 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2002:108877 USPATFULL <<LOGINID::20070228>>
TITLE: Endoglucanases
INVENTOR(S): Schulein, Martin, Copenhagen, DENMARK
Andersen, Lene Nonboe, Aller.o slashed.d, DENMARK
Lassen, S.o slashed.ren Flensted, Copenhagen, DENMARK
Kauppinen, Markus Sakari, Copenhagen, DENMARK
Lange, Lene, Valby, DENMARK
Nielsen, Ruby Ilum, Farum, DENMARK
Ihara, Michiko, Chiba, JAPAN
Takagi, Shinobu, Chiba, JAPAN
PATENT ASSIGNEE(S): Novozymes A/S, Bagsvaerd, DENMARK (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6387690	B1	20020514
APPLICATION INFO.:	US 1999-229911		19990113 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-651136, filed on 21 May 1996, now patented, Pat. No. US 6001639

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1995-272	19950317
	DK 1995-885	19950808
	DK 1995-886	19950808
	DK 1995-887	19950808
	DK 1995-888	19950808
	DK 1996-137	19960212

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Slobodyansky, Elizabeth
LEGAL REPRESENTATIVE: Lambiris, Elias J.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 5582
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to enzyme preparations consisting essentially of an enzyme which has cellulytic activity and comprises a first amino acid sequence consisting of 14 amino acid residues having the following sequence

Thr Arg Xaa Xaa Asp Cys Cys Xaa Xaa Xaa Cys Xaa
1 2 3 4 5 6 7 8 9 10 11 12

Trp Xaa
13 14

and a second amino acid sequence consisting of 5 amino acid residues having the following sequence

Trp Cys Cys Xaa Cys
1 2 3 4 5

wherein, in position 3 of the first sequence, the amino acid is Trp, Tyr or Phe; in position 4 of the first sequence, the amino acid is Trp, Tyr or Phe; in position 8 of the first sequence, the amino acid is Arg, Lys or His; in position 9, 10, 12 and 14, respectively, of the first sequence, and in position 4 of the second sequence, the amino acid is any of the 20 naturally occurring amino acid residues with the provisos that, in the first amino acid sequence, (i) when the amino residue in position 12 is Ser, then the amino acid residue in position 14 is not Ser, and (ii) when the amino residue in position 12 is Gly, then the amino acid residue in position 14 is not Ala, performs very good in industrial applications such as laundry compositions, for biopolishing of newly manufactured textiles, for providing an abraded look of cellulosic fabric or garment, and for treatment of paper pulp. Further, the invention relates to DNA constructs encoding such enzymes, a method for providing a gene encoding for such enzymes, a method of producing the enzymes, enzyme preparations containing such enzymes, and the use of these enzymes for a number of industrial applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 36 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2001:121435 USPATFULL <<LOGINID::20070228>>
TITLE: Variant EGIII-like cellulase compositions
INVENTOR(S): Mitchinson, Colin, Half Moon Bay, CA, United States
Wendt, Dan J., Walnut Creek, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6268328	B1	20010731
APPLICATION INFO.:	US 1998-216295		19981218 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Gupta, Yogendra N.
ASSISTANT EXAMINER: Elhilo, Eisa
LEGAL REPRESENTATIVE: Genencor International, Inc.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1619
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases which have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having improved stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 37 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2001:67440 USPATFULL <<LOGINID::20070228>>
TITLE: Xylanases, genes encoding them, and uses thereof
INVENTOR(S): Paloheimo, Marja, Vantaa, Finland
Hakola, Satu, Perttula, Finland
Mantyla , Arja, Helsinki, Finland
Vehmaanpera , Jari, Klaukkala, Finland
Lantto, Raija, Klaukkala, Finland
Lahtinen, Tarja, Vantaa, Finland
Fagerstrom, Richard B., Espoo, Finland
Suominen, Pirkko, Helsinki, Finland
PATENT ASSIGNEE(S): Rohn Enzyme Finland OY, Rajamaki, Finland (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6228629	B1	20010508

APPLICATION INFO.: US 1996-768373 19961217 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-20389P	19960628 (60)
	US 1995-8746P	19951218 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Rao, Manjunath
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1523
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB DNA encoding novel xylanases, vectors containing such DNA, hosts transformed with such DNA, enzyme preparations, and the use of such preparations are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 38 OF 41 USPATFULL on STN
ACCESSION NUMBER: 2001:18266 USPATFULL <<LOGINID::20070228>>
TITLE: Cellulases, the genes encoding them and uses thereof
INVENTOR(S): Miettinen-Oinonen, Arja, Masala, Finland
Londesborough, John, Helsinki, Finland
Vehmaanpera , Jari, Klaukkala, Finland
Haakana, Heli, Rajamaki, Finland
Mantyla , Arja, Helsinki, Finland
Lantto, Raija, Klaukkala, Finland
Elovainio, Minna, Helsinki, Finland
Joutsjoki, Vesa, Helsinki, Finland
Paloheimo, Marja, Vantaa, Finland
Suominen, Pirkko, Helsinki, Finland
PATENT ASSIGNEE(S): Rohm Enzyme Finland OY, Rajamaki, Finland (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6184019	B1	20010206
APPLICATION INFO.:	US 1999-329350		19990610 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-841636, filed on 30 Apr 1997 Continuation of Ser. No. WO 1996-FI550, filed on 17 Oct 1996 Continuation-in-part of Ser. No. US 1996-732181, filed on 16 Oct 1996

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-5335P	19951017 (60)
	US 1995-7926P	19951204 (60)
	US 1996-20840P	19960628 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 47 Drawing Figure(s); 37 Drawing Page(s)
LINE COUNT: 3192
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes encoding novel cellulases, and a gene encoding a protein that facilitates the action of such novel cellulases, the novel cellulases and a protein that facilitates the action of such cellulases, and enzyme preparations containing such proteins are described The native hosts and the culture medium of said hosts containing said novel cellulases are also disclosed. These proteins are especially useful in the textile and detergent industry and in pulp and paper industry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 39 OF 41 USPATFULL on STN
ACCESSION NUMBER: 1999:163494 USPATFULL <<LOGINID::20070228>>
TITLE: Endoglucanases
INVENTOR(S): Schulein, Martin, Copenhagen, Denmark
Andersen, Lene Nonboe, Aller.o slashed.d, Denmark
Lassen, S.o slashed.ren Flensted, Copenhagen, Denmark
Kauppinen, Markus Sakari, Copenhagen, Denmark
Lange, Lene, Valby, Denmark
Nielsen, Ruby Iium, Farum, Denmark
Ihara, Michiko, Chiba, Japan
Takagi, Shinobu, Chiba, Japan
PATENT ASSIGNEE(S): Novo Nordisk A/S, Bagsvaerd, Denmark (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6001639		19991214
APPLICATION INFO.:	US 1996-651136		19960521 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. WO 1996-DK105, filed on 18 Mar 1996

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1995-272	19950317
	DK 1995-885	19950808
	DK 1995-886	19950808
	DK 1995-887	19950808
	DK 1995-888	19950808
	DK 1996-137	19960212

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Carlson, Karen Cochrane
ASSISTANT EXAMINER: Slobodyansky, Elizabeth
LEGAL REPRESENTATIVE: Zelson, Esq., Steve T., Gregg, Esq., Valeta
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 6231
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to enzyme preparations consisting essentially of an enzyme which has cellulytic activity and comprises a first amino acid sequence consisting of 14 amino acid residues having the following sequence

Thr Arg Xaa Xaa Asp Cys Cys Xaa Xaa
(SEQ ID NO:79)
1 2 3 4 5 6 7 8 9

Xaa Cys Xaa Trp Xaa
10 11 12 13 14

and a second amino acid sequence consisting of 5 amino acid residues having the following sequence

Trp Cys Cys Xaa Cys
(SEQ ID NO:80)
1 2 3 4 5

wherein, in position 3 of the first sequence, the amino acid is Trp, Tyr or Phe; in position 4 of the first sequence, the amino acid is Trp, Tyr or Phe; in position 8 of the first sequence, the amino acid is Arg, Lys or His; in position 9, 10, 12 and 14, respectively, of the first sequence, and in position 4 of the second sequence, the amino acid is any of the 20 naturally occurring amino acid residues with the provisos that, in the first amino acid sequence, (i) when the amino residue in position 12 is Ser, then the amino acid residue in position 14 is not Ser, and (ii) when the amino residue in position 12 is Gly, then the amino acid residue in position 14 is not Ala, performs very good in industrial applications such as laundry compositions, for biopolishing

of newly manufactured textiles, for providing an abraded look of cellulosic fabric or garment, and for treatment of paper pulp. Further, the invention relates to DNA constructs encoding such enzymes, a method for providing a gene encoding for such enzymes, a method of producing the enzymes, enzyme preparations containing such enzymes, and the use of these enzymes for a number of industrial applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 40 OF 41 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388543 CAPLUS <<LOGINID::20070228>>
DOCUMENT NUMBER: 129:64085
TITLE: The ACEI and ACEII transcription factors of Trichoderma reesei and their use in the expression of foreign genes in Trichoderma
INVENTOR(S): Saloheimo, Anu; Aro, Nina; Ilmen, Marja; Penttila, Merja
PATENT ASSIGNEE(S): Rohm Enzyme Finland Oy, Finland; Saloheimo, Anu; Aro, Nina; Ilmen, Marja; Penttila, Merja
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9823642	A1	19980604	WO 1997-FI743	19971201
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9851235	A	19980622	AU 1998-51235	19971201
EP 950064	A1	19991020	EP 1997-945899	19971201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1996-32156P P 19961129
US 1996-32959P P 19961213
US 1997-40140P P 19970310
WO 1997-FI743 W 19971201

AB A pair of transcription factors, ACEI and ACEII, involved in regulation of the CBHI gene of Trichoderma reesei are identified and the ace1 and ace2 genes encoding them are cloned. The transcription factors and the elements they bind to may be of use in the expression of foreign genes in Trichoderma. CDNAs for these factors were cloned using a yeast reporter gene system to identify clones encoding factors affecting transcription from a promoter of a gene from a filamentous fungus. The proteins encoded by these genes have DNA-binding domains, but do not show any significant sequence similarity to other transcription factors. Expression of the genes in Trichoderma reesei was controlled by the nature and co.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 41 OF 41 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 1997-341683 [31] WPIDS
CROSS REFERENCE: 1997-341682
DOC. NO. CPI: C1997-109830 [31]
TITLE: Nucleic acid encoding new xylanase(s) from ***Chaetomium*** thermophilum - useful for treating wood pulp, animal feed and flour, e.g. to facilitate bleaching
DERWENT CLASS: D11; D13; D16; F09
INVENTOR: FAGERSTROEM R; FAGERSTROEM R B; FAGERSTROM R; HAKOLA S; LAHTINEN T; LANTTO R; MAENTYLAE A; MANTYLA A; PALOHEIMO M; SUOMINEN P; VEHMAANPERA J; VEHMAANPERAE J
PATENT ASSIGNEE: (ENZY-N) ENZYMES AB OY; (PRIM-N) PRIMALCO LTD; (ROHG-C)

ROEHM ENZYME FINLAND OY
COUNTRY COUNT: 70

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9722692	A1	19970626	(199731)*	EN	77	[10]
AU 9710996	A	19970714	(199744)	EN		
EP 870015	A1	19981014	(199845)	EN		
US 6228629	B1	20010508	(200133)	EN		
US 6635464	B1	20031021	(200370)	EN		
EP 870015	B1	20040317	(200421)	EN		
DE 69631899	E	20040422	(200428)	DE		
EP 1433843	A2	20040630	(200443)	EN		
ES 2217333	T3	20041101	(200474)	ES		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9722692	A1	WO 1996-FI671	19961217
US 6228629	B1 Provisional	US 1995-8746P	19951218
US 6635464	B1 Provisional	US 1995-8746P	19951218
US 6228629	B1 Provisional	US 1996-20389P	19960628
US 6635464	B1 Provisional	US 1996-20839P	19960628
DE 69631899	E	DE 1996-69631899	19961217
EP 870015	A1	EP 1996-941682	19961217
EP 870015	B1	EP 1996-941682	19961217
DE 69631899	E	EP 1996-941682	19961217
EP 1433843	A2 Div Ex	EP 1996-941682	19961217
ES 2217333	T3	EP 1996-941682	19961217
US 6228629	B1	US 1996-768373	19961217
US 6635464	B1 Div Ex	US 1996-768373	19961217
EP 870015	A1	WO 1996-FI671	19961217
EP 870015	B1	WO 1996-FI671	19961217
DE 69631899	E	WO 1996-FI671	19961217
AU 9710996	A	AU 1997-10996	19961217
US 6635464	B1	US 2001-849242	20010507
EP 870015	B1 Related to	EP 2003-27255	19961217
EP 1433843	A2	EP 2003-27255	19961217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69631899 E	Based on	EP 870015 A
EP 1433843 A2	Div ex	EP 870015 A
ES 2217333 T3	Based on	EP 870015 A
US 6635464 B1	Div ex	US 6228629 B
AU 9710996 A	Based on	WO 9722692 A
EP 870015 A1	Based on	WO 9722692 A
EP 870015 B1	Based on	WO 9722692 A
DE 69631899 E	Based on	WO 9722692 A

PRIORITY APPLN. INFO: US 1996-20839P 19960628
US 1995-8746P 19951218
US 1996-20389P 19960628
US 1996-768373 19961217
US 2001-849242 20010507
AN 1997-341683 [31] WPIDS
CR 1997-341682
AB WO 1997022692 A1 UPAB: 20060113

Nucleic acid (A) encoding a polypeptide (I) with xylanase activity (a) encodes a 261, 230 or 224 amino acid (aa) protein (sequences given in the specification, together with the 1281, 1174 and 1142 bp sequences encoding them, deposited in plasmids as DSM 11021, 11022 and 11023, respectively); (b) contains the coding region of the sequences specified in (a); (c) is any sequence equivalent to (a) or (b) within the degeneracy of the genetic code; or (d) any sequence that hybridises with (a)-(c) and encodes a

xylanase with aa identity at least 80% with the 3 proteins specified in (a).

USE - (I) are used to degrade xylan-containing substrates, specifically to treat wood pulp or fibre, particularly to assist bleaching of chemical or mechanical pulp but also in debarking logs, refining wood to reduce the energy demands in pulping, to increase external fibrillation and improve fibre swelling, and to improve pulp draining and/or reduce water retention; to improve quality of animal feeds (increasing growth rate and feed utilisation) or in baking (added to the flour to improve dough and bread characteristics such as loaf volume and texture). (A) is used to produce recombinant (I).

ADVANTAGE - Treatment of pulp with (I) facilitates removal of lignin, reducing the amount of bleaching chemicals needed and generating a product of increased brightness. (I) do not affect cellulose so product strength is not adversely affected. (I) can be used directly from the culture broth (no purification needed), has maximum activity at 60.degree.C or over and is active even at neutral or slightly alkaline pH.

=> d his

L1 QUE CELLOBIOHYDROLASE###

L2 7559 S L1
L3 1619 S (GENE OR SEQUENCE OR POLYNUCLEOTIDE)(S)L2
L4 847 S (CLONE OR RECOMBINANT OR EXPRESS?)(S) L3
L5 56 S (MUTANT OR VARIANT)(S) L4
L6 0 S CHAETOMIUM(S) L5
L7 8 S CHAETOMIUM AND L5
L8 43 S CHAETOMIUM AND L4
L9 51 S THERMOPHILUM AND L4
L10 48 DUP REM L9 (3 DUPLICATES REMOVED)
L11 41 DUP REM L8 (2 DUPLICATES REMOVED)

=> log y

NiceZyme View of ENZYME: EC 3.2.1.91

Official Name

Cellulose 1,4-beta-cellobiosidase.

Alternative Name(s)

1,4-beta-cellobiohydrolase.

Exocellobiohydrolase.

Exoglucanase.

Reaction catalysed

Hydrolysis of 1,4-beta-D-glucosidic linkages in cellulose and cellotetraose, releasing cellobiose from the non-reducing ends of the chains

Cross-references

Biochemical Pathways; map number(s)	A4
PROSITE	PDOC00510 ; PDOC00563 ; PDOC00565
BRENDA	3.2.1.91
PUMA2	3.2.1.91
PRIAM enzyme-specific profiles	3.2.1.91
KEGG Ligand Database for Enzyme Nomenclature	3.2.1.91
IUBMB Enzyme Nomenclature	3.2.1.91
IntEnz	3.2.1.91
MEDLINE	Find literature relating to 3.2.1.91
MetaCyc	3.2.1.91
UniProtKB/Swiss-Prot	O68438, CELK_CLOTM; P10474, GUNB_CALSA; Q7SA23, GUX1A_NEUCR; P38676, GUX1B_NEUCR; O59843, GUX1_ASPAC; Q00328, GUX1_COCCA; Q00548, GUX1_CRYPA; P15828, GUX1_HUMGT; Q06886, GUX1_PENJA; P13860, GUX1_PHACH; Q9P8P3, GUX1_TRIHA; P62695, GUX1_TRIKO; P62694, GUX1_TRIRE; P19355, GUX1_TRIVI; Q92400, GUX2_AGABI; P50900, GUX2_CLOSR; P07987, GUX2_TRIRE; P49075, GUX3_AGABI; Q9C1S9, GUX6_HUMIN; P50401, GUXA_CELFI; P50899, GUXB_CELFI;